

II. Amendments to the Claims:

This listing of claims replaces without prejudice all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-34 (Cancelled).

35. (Currently Amended) An inspection lamp for use in detecting leaks using a fluorescent leak detection dye from a liquid or air circulating system, the lamp comprising:

- a) a flashlight having a housing,
 - b) a plurality of LEDs housed within the housing and arranged in a cluster or array of less than 2 inches diameter; and
 - c) batteries contained within the flashlight to supply direct current power to the LEDs, the LEDs in total consuming 7.2 watts or less,
- wherein the flashlight is untethered and handheld,
- wherein each LED produces a narrow beam of approximately 30 degrees or less that projects directionally intense radiation,
- wherein the radiation is emitted directly without reflection from the LEDs to the system, beyond the housing of the flashlight,
- wherein the radiation is unfiltered between the LEDs and the system, and

wherein each LED emits violet, near ultraviolet radiation having most of its energy within a visible range of from 395 to 415 nanometers, different from the fluorescent leak detection dye absorption peak wavelength, in order to produce fluorescence of leak detection dye that leaks from the system.

36. (Currently Amended) An inspection lamp for use in detecting leaks from a liquid or air circulating system using a fluorescent leak detection dye, the lamp comprising:

at least one LED capable of emitting radiation to produce fluorescence of leak detection dye that leaks from the system; and

a power supply connected to said at least one LED to provide said at least one LED with electricity, and wherein a substantial portion of the wavelength of radiation emitted from the at least one LED falls within a range from 395 to 415 nanometers, different from the fluorescent leak detection dye absorption peak wavelength, and wherein substantially less radiation is emitted from the at least one LED in wavelengths above 415 nanometers than is emitted within the range from 395 to 415 nanometers; and

a housing having an open end,

wherein said at least one LED is attached to a substrate and is mounted within said housing adjacent the open end, and said at least one LED is oriented to emit radiation through the open end, and

wherein the housing is handheld.

37. (Previously Presented) The lamp of claim 36 wherein the beam angle of radiation emitted from each LED is less than or equal to 30 degrees.

38. (Previously Presented) The lamp of claim 36 further comprising a lens mounted to said open end for focusing said radiation emitted by said LEDs.

39. (Previously Presented) The lamp of claim 38 wherein said lens provides a usable beam of radiation for a distance 5 to 10 feet from said lens.

40. (Previously Presented) The lamp of claim 36 wherein said power supply comprises a battery and the housing is untethered.

41. (Currently Amended) A method for detecting a leak in a liquid or air circulating system, comprising the steps of:

applying a fluorescent material to the system in a manner to cause the material to leak from the system;

activating at least one LED in a handheld housing having an open end through which the radiation emits radiation, a substantial portion of the wavelength of radiation emitted from the at least one LED falling within a range from 395 to 415 nanometers, different from the fluorescent leak detection dye absorption peak wavelength, and wherein substantially less radiation is emitted from the at least one LED in wavelengths above 415 nanometers than is emitted within the range from 395 to 415 nanometers; and

shining the radiation transmitted from the at least one LED onto the system to excite leaked fluorescent material; and

detecting a leak by the fluorescence of the leaked fluorescent material.

42. (Previously Presented) The method of claim 41, further comprising the step of focusing said radiation emitted from said at least one LED using a lens.

43. (Previously Presented) A kit comprising:
the lamp of claim 36, and
a fluorescent material capable of absorbing at least a portion of the radiation emitted from the at least one LED, and fluorescing at a visible wavelength as a result.

44. (New) An inspection lamp for use in detecting leaks using a fluorescent leak detection dye from a liquid or air circulating system, the lamp comprising:

- a) a flashlight having a housing,
 - b) a plurality of LEDs housed within the housing and arranged in a cluster or array of less than 2 inches diameter; and
 - c) batteries contained within the flashlight to supply direct current power to the LEDs, the LEDs in total consuming 7.2 watts or less,
- wherein the flashlight is untethered and handheld,

wherein each LED produces a narrow beam of approximately 30 degrees or less that projects directionally intense radiation,

wherein the radiation is emitted directly without reflection from the LEDs to the system, beyond the housing of the flashlight,

wherein the radiation is unfiltered between the LEDs and the system, and

wherein each LED emits violet, near ultraviolet radiation having most of its energy within a visible range of from 395 to 415 nanometers, unmatched to the fluorescent leak detection dye absorption peak wavelength, in order to produce fluorescence of leak detection dye that leaks from the system.

45. (New) An inspection lamp for use in detecting leaks from a liquid or air circulating system using a fluorescent leak detection dye, the lamp comprising:

at least one LED capable of emitting radiation to produce fluorescence of leak detection dye that leaks from the system; and

a power supply connected to said at least one LED to provide said at least one LED with electricity, and wherein a substantial portion of the wavelength of radiation emitted from the at least one LED falls within a range from 395 to 415 nanometers, unmatched to the fluorescent leak detection dye absorption peak wavelength, and wherein substantially less radiation is emitted from the at least one LED in wavelengths above 415 nanometers than is emitted within the range from 395 to 415 nanometers; and

a housing having an open end,

wherein said at least one LED is attached to a substrate and is mounted within said housing adjacent the open end, and said at least one LED is oriented to emit radiation through the open end, and

wherein the housing is handheld.

46. (New) The lamp of claim 45 wherein the beam angle of radiation emitted from each LED is less than or equal to 30 degrees.

47. (New) The lamp of claim 45 further comprising a lens mounted to said open end for focusing said radiation emitted by said LEDs.

48. (New) The lamp of claim 47 wherein said lens provides a usable beam of radiation for a distance 5 to 10 feet from said lens.

49. (New) The lamp of claim 45 wherein said power supply comprises a battery and the housing is untethered.

50. (New) A method for detecting a leak in a liquid or air circulating system, comprising the steps of:

applying a fluorescent material to the system in a manner to cause the material to leak from the system;

activating at least one LED in a handheld housing having an open end through which the radiation emits radiation, a substantial portion of the wavelength of

radiation emitted from the at least one LED falling within a range from 395 to 415 nanometers, unmatched to the fluorescent leak detection dye absorption peak wavelength, and wherein substantially less radiation is emitted from the at least one LED in wavelengths above 415 nanometers than is emitted within the range from 395 to 415 nanometers; and

shining the radiation transmitted from the at least one LED onto the system to excite leaked fluorescent material; and

detecting a leak by the fluorescence of the leaked fluorescent material.

51. (New) The method of claim 50, further comprising the step of focusing said radiation emitted from said at least one LED using a lens.

52. (New) A kit comprising:

the lamp of claim 45, and

a fluorescent material capable of absorbing at least a portion of the radiation emitted from the at least one LED, and fluorescing at a visible wavelength as a result.